Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Parts 21 and 74	)	
of the Commission's Rules With Regard to	)	WT Docket No. 02-68
Licensing in the Multipoint	)	RM-9718
Distribution Service and in the	)	
Instructional Television Fixed Service for the	)	
Gulf of Mexico	)	
	)	

NOTICE OF PROPOSED RULEMAKING

Adopted: March 27, 2002 **Released: May 3, 2002**

Comments Due: 60 days after publication of this Notice in the Federal Register
Reply Comments Due: 90 days after publication of this Notice in the Federal Register

By the Commission:

I. INTRODUCTION

1. The Commission has before it an amended petition for rulemaking filed by PetroCom License Corporation ("Petitioner"), requesting that the Commission amend its rules to permit licensing of the Multipoint Distribution Service ("MDS") and Instructional Television Fixed Service ("ITFS") spectrum in the Gulf of Mexico.[1] MDS operators and ITFS licensees share spectrum in the 2500-2690 MHz band.[2] Both services operate as either point-to-point or point-to-multipoint services, with MDS serving businesses and consumers. ITFS channels are allocated to educational organizations and are used primarily for the transmission of instructional, cultural and other types of educational material. Petitioner is the successor in interest to Gulf Coast MDS Service Company, which filed a similar Petition for Rulemaking on May 21,

[1] Amended Petition for Rulemaking of PetroCom License Corporation ("Amended Petition") (November 23, 1998).

[2] We note that this band and other bands are being considered for possible advanced wireless service use pursuant to a notice of proposed rulemaking issued January 5, 2001. *See Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems*, FCC 00-455 (January 5, 2001). On September 24, 2001, the Commission adopted a *First Report and Order and Memorandum Opinion and Order ("First R&O/MO&O")*, FCC 01-256, in the New Advanced Wireless Services proceeding. *The First R&O* adds a mobile allocation to the 2500-2690 MHz band to provide additional near-term and long-term flexibility for use of this spectrum, thereby making this band potentially available for advanced mobile and fixed terrestrial wireless services, including third generation and future generations of wireless systems. The Commission decided not to relocate the existing licensees and recognized that it will have to explore the service rules that would apply to permit mobile operations in the 2500-2690 MHz band in a separate future proceeding.

1996.[3] Petitioner asks that the Commission establish a Basic Trading Area like-service area[4] in the Gulf similar to the ones established in *Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act - Competitive Bidding*, 10 FCC Rcd 9589, 9619 (1995) ("*MDS Report and Order"*).[5]

2. We propose to establish a BTA-like area in the Gulf of Mexico ("Gulf Service Area"). The proposed area would be subject to the same rules, with certain limitations, as those BTA-like service areas established in the *MDS Report and Order*. We solicit comment on the technical and economic effects of implementing our proposals.

3. In the *MDS Report and Order*, we defined the service areas for MDS authorizations and established competitive bidding procedures to select among mutually exclusive applicants for those authorizations. In *Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions*, 13 FCC Rcd 19112 (1998), *recon.*, 14 FCC Rcd 12764 (1999), *further recon.*, 15 FCC Rcd 14566 (2000) ("*Two-Way Order*"), we amended Parts 21 and 74 of our rules to provide licensees in MDS and ITFS with substantially increased operational and technical flexibility.

4. Our goal in instituting this proceeding is to continue the work begun in the *Two-Way Order* to encourage the most efficient utilization of spectrum. As discussed in the *Two-Way Order*, although the MDS spectrum historically has been primarily used to provide either one-way video service or wireless cable service to subscribers, some of the subject spectrum has been used in recent years for the provision of two-way service. This type of usage is expected to increase dramatically in the next few years as two-way systems are deployed. These two-way systems will be capable of very high speed and high capacity data transmission, making them particularly suited for business use.[6] Due to its relatively small and transient population and almost exclusively industrial use, we expect business use to predominate in the proposed Gulf Service Area.

---

[3] After Petitioner filed its Amended Petition on November 23, 1998, The Wireless Communications Association International, Inc. ("WCA") filed an opposition to the Amended Petition on September 10, 1999. In addition, Bachow/Coastel, L.L.C. ("Barchow/Coastel") and RIG Telephones Inc. d/b/a Datacom ("DataCom") each filed comments on September 10, 1999. Petitioner thereafter filed additional comments on September 10, 1999 and reply comments on September 27, 1999. Bachow/Coastel filed reply comments on September 24, 1999, WCA filed a reply on September 27, 1999, and DataCom filed reply comments on September 27, 1999. Finally, on October 8, 1999, WCA filed comments in the form of a letter and Petitioner responded by letter on November 10, 1999. These letters were not authorized pleadings pursuant to our rules; however, they have been made part of the record in this proceeding.

[4] Rand McNally defined 487 Basic Trading Areas ("BTAs") in the 1992 *Commercial Atlas and Marketing Guide*. Because Rand McNally did not include some geographic areas that were the subject of the MDS auction, those areas were added to Rand McNally's list as BTA-like geographic areas, bringing the total to 493 authorizations to be auctioned. Specifically, under Section 21.924(b) of the Commission's Rules, 47 C.F.R. § 21.924(b), the six BTA-like areas are set forth as follows: American Samoa, Guam, Northern Mariana Islands, San Juan, Puerto Rico; Mayaguez/Aguadilla-Ponce, Puerto Rico; and the United States Virgin Islands. Under the proposal in this proceeding, the Gulf of Mexico would become the 494th authorization and be subject to the same rules and obligations as other BTA holders as defined in pursuant 47 C.F.R. § 21.2. For further discussion, see *infra* ¶ 16.

[5] Petition for Rulemaking of Gulf Coast MDS Service Company ("Gulf Petition") (May 21, 1996) at 5; Amended Petition at 4.

[6] *Two-Way Order*, 13 FCC Rcd at 19116.

5. An initial filing window for two-way service was held from August 14 - 18, 2000. Following this initial filing window, on April 16, 2001, the Bureau commenced a rolling one-day filing window process, which permits licensees to apply for authorizations on a first-come first-served basis.[7] To date, approximately 1,600 of those applications have been granted.

II. BACKGROUND

6. Petitioner applied to the Commission for developmental authority to construct and operate a digital microwave network on platforms in the Gulf using MDS and ITFS frequencies. The developmental authority was granted on January 23, 1997 and modified on May 1, 1998. Petitioner's request for extension of its developmental authorization was denied.[8]

7. In the *MDS Report and Order*, we adopted a licensing plan under which we assigned, through a simultaneous multiple round bidding process[9], one MDS authorization for each of the 487 BTAs and six additional BTA-like geographic areas.[10] A BTA authorization holder may construct facilities to provide service over any usable MDS channels within the BTA.[11] A MDS channel is usable if the proposed station design is in compliance with the Commission's interference standards.[12]

8. The signals of a BTA authorization holder cannot interfere with those of any other BTA authorization holder.[13] Because BTA lines do not always track desired service areas, however, the rules permit BTA authorization holders to negotiate interference protection rights.[14] In addition, BTA authorization holders must honor the protected service areas of incumbent MDS operators and ITFS licensees

---

[7] *Public Notice*, DA 01-751 (MMB March 26, 2001).

[8] *Letter to Richard Myers, et al, from Charles E. Dziedzic, Assistant Chief, Video Services Division, Mass Media Bureau* (May 15, 2000). In denying Petitioner continued developmental authority, the Commission specifically noted, "PetroCom has shown that a [Wireless Local Loop] WLL system can be viable in the Gulf, and therefore, a move to commercialization of the spectrum and/or system is appropriate." *Id.* On June 14, 2000, PetroCom filed an application for interim operating authority, as well as a request for special temporary authority, to continue operation of its developmental system in the Gulf. On August 15, 2000, the Bureau denied that request. *Letter to Richard S. Myers, Esq., et al, from Charles E. Dziedzic, Assistant Chief, Video Services Division, Mass Media Bureau* (August 15, 2000). PetroCom also filed applications for review of the Bureau's May 15th denial of PetroCom's request for extension of developmental authority and the Bureau's August 15th denial of PetroCom's application for interim operating authority and its request for special temporary authority. On February 21, 2001, the Commission denied PetroCom's applications for review. *In the Matter of PetroCom License Corporation*, 16 FCC Rcd 4980 (2001).

[9] On March 28, 1996, the Federal Communications Commission completed its auction of authorizations to provide MDS in 493 BTAs and BTA-like areas. *See Public Notice, Winning Bidders in the Auction of Authorizations to Provide Multipoint Distribution Service in 493 Basic Trading Areas*, No. 62216 (released March 29, 1996).

[10] *MDS Report and Order*, 10 FCC Rcd at 9608-09.

[11] *Id.* at 9615-18.

[12] *Id.* at 9591.

[13] 47 C.F.R. § 21.902.

[14] 47 C.F.R. § 21.937.

within their BTAs.[15] The rules permit BTA authorization holders to assign or to transfer their entire BTAs, or to partition portions of BTAs, to other parties.[16]

III. DISCUSSION

A. Creation of Service Area

9. According to Petitioner, the principal users of the services operating over the MDS/ITFS spectrum in the Gulf of Mexico will be the oil and gas industries, which are increasing their demand for telecommunications capabilities in a variety of offshore environments and applications. Petitioner contends that many of these telecommunications needs are not being met by currently authorized services in the Gulf, including point-to-point microwave, very small aperture terminal systems and cellular communications. Petitioner argues that the absence of incumbent licensees on the MDS and ITFS frequencies in the Gulf makes those frequencies appropriate to meet "pent-up demand" for new services. The use of these frequencies is especially apt, Petitioner asserts, because increased sophistication and versatility of equipment designed to operate in the 2500-2690 MHz band would enable industrial users to more efficiently conduct their exploration and production operations from sites such as drilling rigs and production platforms.[17]

10. In response, WCA argues that MDS service in the Gulf is not needed and that MDS auction winners whose authorizations lie along the Gulf planned their bidding strategies and paid a higher price for their authorizations based on the assumption that they would not need to address interference problems on the sides of their BTAs that abut the Gulf. WCA claims that these authorization holders might not have paid as much for their BTA authorizations if they had known that a Gulf Service Area was to be established in the future.[18]

11. We reject WCA's contention that it would have been reasonable for applicants in the original MDS auction to have based their bidding strategy upon the assumption that, in the future, the Commission would not designate a Gulf service area or auction authorizations for such a service area. As a general matter, in circumstances such as this, we expect all applicants when developing their bidding strategies to take into consideration potential allocation or auction determinations that would result in additional auctions in the service. Therefore, we tentatively agree with Petitioner's assertions and propose to auction a BTA-like service area in the Gulf of Mexico. We note that there is precedent for our action here in that we have licensed telecommunications service in the Gulf of Mexico before, notably in *Petroleum Communications, Inc.*, 54 Rad. Reg. 2d (P&F) 1020 (1983).[19] Furthermore, the *MDS Report and Order* never indicated that new BTA-like areas could not be created or that the existing BTAs, including those bordering United States territorial waters, were in some way protected against the future creation of new

[15] 47 C.F.R. § 21.933.

[16] 47 C.F.R. §§ 21.931, 21.934.

[17] Gulf Petition at 3.

[18] WCA's Opposition to Petition for Rulemaking ("WCA Opposition") (September 10, 1999) at 5-8, 13-15.

[19] In addition, the Commission has adopted the Second Further Notice of Proposed Rulemaking concerning the licensing of cellular service and other commercial mobile radio services ("CMRS") in the Gulf of Mexico. *Public Notice, Federal Register Publication of the Second Further Notice of Proposed Rule Making Regarding the Licensing of Cellular Service and Other Commercial Mobile Radio Services in the Gulf of Mexico,* 15 FCC Rcd 5697 (2000); *Cellular Service and Other Commercial Mobile Radio Services in the Gulf of Mexico*, *Second Further Notice of Proposed Rule Making*, 12 FCC Rcd 4578 (1997).

service areas. Indeed, in light of the Commission's actions over the last several years to encourage the most efficient use of spectrum by private users, WCA and other interested parties had no reason to expect that, absent substantial and compelling public interest reasons, we would leave a portion of the spectrum under our jurisdiction permanently fallow.[20] Finally, with respect to WCA's concerns about land-based BTA holders receiving potential unreasonable interference from any Gulf system(s), we address these concerns *supra* ¶¶ 14-15, in the section entitled, "Amount of Spectrum to be Licensed" and *supra* ¶¶ 38-45, in the section entitled, "Interference Protection Requirements."

B. Use of ITFS Spectrum

12. Petitioner has requested that all of the spectrum currently available for wideband land-based MDS/ITFS operations, *i.e.*, the entire spectrum encompassing the blocks 2500-2690 MHz and 2150-2162 MHz, be made available for use in the Gulf of Mexico.[21]

13. We propose to exclude all ITFS channels from licensing in the new Gulf Service Area. ITFS licensees have not expressed interest in obtaining licenses in the Gulf, the area most likely has little need for educational service, and the requested commercial use does not require the full bandwidth available in the 2500-2690 MHz band. We seek comments on this proposal, in particular from educational organizations.

C. Amount of Spectrum to be Licensed

14. In evaluating the amount of spectrum to be licensed, we believe 4 essential factors should be considered: (a) the current and potential future demand for the communications service to be provided in the Gulf; (b) the emissions and bandwidths likely to be used to satisfy the service needs; (c) any alternative spectrum available which can also be used to provide the service; and (d) the potential for harmful interference to existing services using the same, or adjacent, spectrum. With respect to Petitioner's proposal to license the entire bandwith available in the 2500-2690 MHz band, we make the following observations regarding these four factors and request comment where appropriate:

> (a) Demand Petitioner states that the population in the Gulf consists of approximately 20,000 potential users, located on oil platforms spread out over thousands of square miles proximate to the shoreline extending from Texas to Florida.[22] In contrast to this figure, WCA points out that there are over 16 million potential customers residing in the land-based areas proximate to Gulf waters.[23] Based on the figures provided to us by

[20] *See* 47 U.S.C. § 309(j)(3)(D) (Commission to promote efficient and intensive use of the electromagnetic spectrum). The Commission has routinely held that "spectrum should not lie fallow when there are applicants ready and willing to use it." *Mobilcomm Pittsburg, Inc*., 8 FCC Rcd 351 (1993). *See also Amendment of Section 73.202(b), Table of Assignments, FM Broadcast Stations*, 62 FCC 2d 76, 80 (1976) (finding "little benefit to the public interest in allowing a channel to lie fallow and unused . . . ."); *Aeronautical Radio Inc*., 3 FCC Rcd 6994, 6995 (1998) (stating that the FCC's channel recovery policies ensure that scarce spectrum space is either put to prompt use by the existing licensee or returned for reassignment to another ready and able to construct).

[21] Amended Petition at 1-2.

[22] Amended Petition at 9.

[23] WCA Opposition at 5.

the parties, it appears that the density of users (*i.e.* response stations per sq. mile) in the Gulf will be extremely low and will grow very slowly, if at all.[24] However, in nearby cities such as New Orleans and Houston, heavy spectrum demands will likely continue. We seek comment on the accuracy of the population density estimates provided by Petitioner and WCA as well as comment on the discrepancy of use (predicted low spectrum use in the Gulf vs. continued high spectrum use in nearby land-based cities) in the region.

(b) Emissions and Bandwidth Petitioner's proposed wireless local loop service consists essentially of voice-grade telephony circuits and slow-speed data circuits (*e.g.* 64 kilobits). Using trailing edge technology, over 100 such simultaneous circuits could easily fit within a single 6 MHz MDS channel. Using leading edge coding and modulation, several hundred such circuits could fit within 6 MHz. Thus, a single main or booster station at a single location, using an omnidirectional antenna, could simultaneously serve 100 individual response stations. Using a sectorized transmitting antenna, such as those typically proposed for land-based stations, this single main or booster station could serve 100+ response stations per sector, or a total of many hundreds or thousands of stations, depending on the number of sectors chosen. Within a Gulf of Mexico BTA, hundreds of booster stations could be operated within a 6 MHz bandwidth providing tens of thousands of communications circuits. We seek comment on whether authorizing a single channel would be adequate to meet the potential needs of users in the Gulf.

(c) Alternative Spectrum Petitioner acknowledges that fixed wireless local loop service can also be provided over frequencies licensed in the Wireless Communications Service (WCS) and the Local Multipoint Distribution Service (LMDS). Many hundreds of MHz are available in these services, and cellular telephone service is also available in portions of the Gulf. We seek comment on what effect, if any, the availability of alternative spectrum should have on the amount of bandwith licensed in the Gulf.

(d) Interference As noted above, millions of households are situated in the cities, suburbs and rural areas proximate to the Gulf of Mexico. As a result of the *Two-Way Order*, a significant increase in usage of the MDS/ITFS spectrum is expected to occur in these areas as new two-way systems are constructed and put into operation. These new systems will be intensive users of this spectrum, configured so as to offer service to as many locations as possible while protecting each other from harmful interference. Thus, to the extent that Gulf operations make use of all or part of the MDS spectrum allocation, a potential for interference is created which must be carefully considered.

[24] The MDS spectrum is currently limited to fixed stations and is therefore not available for use by vessels associated with oil drilling or other activities in the Gulf area.

15. Based upon the evaluation criteria set out above, taken both individually and collectively, there appears to be sufficient justification to propose limiting the scope of any MDS spectrum allocation in the Gulf. We realize that, absent (d) Interference, it could be argued that no harm would come from a large MDS spectrum allocation in the Gulf owing to the fact that, as with all relatively isolated areas, an abundance of spectrum gives users much more flexibility in system design and operation than is possible in geographic areas where spectrum is scarce. However, because of the potential for interference to land-based MDS and ITFS systems in the Gulf coast area, we believe that an offshore frequency allocation should be limited in size to no more than is absolutely essential for successful deployment and growth of the proposed service. For example, given the type of communications circuits deployed in Petitioner's existing developmental system, and the circuits likely to be deployed if we authorize regular service in the Gulf, we propose to license one BTA-like service area in the Gulf, consisting of two blocks of spectrum in the 2500-2690 MHz band, each containing two 6 MHz MDS channels. We invite comment on how much bandwith is necessary for service in the Gulf especially in light of the potential interference to nearby land-based MDS and ITFS systems.

D. Boundaries

16. As discussed above, we determined in the *MDS Report and Order* to award MDS authorizations based on BTA and BTA-like service areas. BTAs were designed by Rand McNally to represent the natural flow of commerce, comprising areas within which consumers have a community of interest. BTAs vary in size and shape, typically including a population center(s) (city or large town) and the surrounding rural area. BTA boundaries are based on county lines, but specific boundaries were drawn after a study of such factors as physiography, population distribution, economic activities, newspaper distribution and transportation facilities. The six additional BTA-like service areas created pursuant to the *MDS Report and Order* were based on the same criteria Rand McNally used in creating its 487 BTAs.[25] The proposed Gulf of Mexico service area differs from those previously created in that it lacks any significant population center and is primarily based on the geographic confines of the Gulf and on the commonality of commercial interests of the potential users of any service provided.

17. Petitioner sets forth boundary suggestions for the proposed Gulf Service Area. According to Petitioner, along the coastline from the southernmost tip of Texas to the southernmost tip of Florida, the boundary between the Gulf MDS licensee and the land-based MDS licensees should be the county lines of the adjacent land BTAs. Petitioner cites authority that the county lines in Texas and Florida extend 3 marine leagues (9 nautical miles) from the coastline, while the county lines in Alabama, Mississippi and Louisiana extend 3 geographic miles from the coastline.[26] WCA provides contrary authority that Louisiana extends 3 marine leagues (9 nautical miles) from the coastline.[27] Petitioner further suggests that the outer, seaward boundary of the Gulf service area should be coterminous with the southern boundary of the Exclusive Economic Zone ("EEZ") defined by a 1983 presidential proclamation.[28] The EEZ extends approximately 200 nautical miles from the baseline from which the breadth of the territorial sea is measured. The area beyond this point is international waters, according to Petitioner.[29]

---

[25] *MDS Report and Order*, 10 FCC Rcd at 9609.

[26] Amended Petition at 4.

[27] WCA Opposition at 6-7.

[28] *See* Proclamation No. 5030, 48 Fed. Reg. 10601 (1983).

[29] Amended Petition at 4.

18. In response to Petitioner's suggestions for designating this new BTA-like area, we are proposing to utilize the same boundary definitions for the Gulf Service Area that we adopted for service areas for the wireless communications service in the Gulf of Mexico in the *WCS Report and Order*.[30] In that proceeding, we determined that land-based license regions abutting the Gulf of Mexico will extend to the limit of the territorial waters of the United States in the Gulf, which is the maritime zone that extends approximately twelve nautical miles from the United States coastline.[31] Beyond that line of demarcation, we created a Gulf of Mexico service area which extended from that line outward to the geographic limits consistent with international agreements.[32] We emphasize that any licensing of MDS spectrum in the Gulf would be subject ongoing negotiations with Mexico regarding border coordination issues. Such negotiations may result in different border coordination or protection zones, and different operational restrictions, that would apply to Gulf operations near the Mexican border.[33] We solicit comments on both the economic and technical advantages of this proposal.

E. Filing and auction procedures

1. Statutory Requirements

19. The Balanced Budget Act revised the Commission's auction authority.[34] Specifically, it amended Section 309(j) of the Act to require the Commission to grant licenses through the use of competitive bidding when mutually exclusive applications for initial licenses are filed, unless certain specific statutory exemptions apply.[35] The Balanced Budget Act also added to Section 309(j)(1) a reference to the Commission's obligation under Section 309(j)(6)(E) to use engineering solutions, negotiation, threshold qualifications, service regulations, or other means to avoid mutual exclusivity where it is in the public interest to do so.[36] The Balanced Budget Act did not amend Section 309(j)(3)'s directive to consider certain public interest objectives in identifying classes of licenses and permits to be

---

[30] *Report and Order in the Matter of Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service,* 12 FCC Rcd 10785, 10816 (1997) ("*WCS Report and Order*").

[31] *See* 47 C.F.R. § 27.6(a)(2). *See also Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules*, 15 FCC Rcd 476 (2000); *Service Rules for the 746-764 and 776-794 MHz Bands and Revisions to Part 27 of the Commission's Rules,* 15 FCC Rcd 5299 (2000). In those proceedings, the Commission created geographic areas for the 700 MHz band consistent with geographic area configurations originally established for WCS. Specifically, in creating a Gulf of Mexico Economic Area, the Commission created boundaries consistent with on the *WCS Report and Order*.

[32] Proclamation No. 5928, 54 Fed. Reg. 777 (1988). One U.S. nautical mile is equal to 6080 feet, or 1.853 kilometers.

[33] *See also* 47 C.F.R. § 21.902(b)(6) (stating that a proposed station within 50 miles of the Mexican border must be designed to meet the requirements set forth in international treaties).

[34] 47 U.S.C. § 309(j)(1), (2) (as amended by Balanced Budget Act, § 3002).

[35] *Id*. 47 U.S.C. § 309(j)(2) exempts from auctions licenses and construction permits for public safety radio services, digital television service licenses and permits given to existing terrestrial broadcast licensees to replace their analog television service licenses, and licenses and construction permits for noncommercial educational broadcast stations and public broadcast stations.

[36] 47 U.S.C. §§ 309(j)(1), 309(j)(6)(E).

issued by competitive bidding.[37]

20. In a Report and Order and Further Notice of Proposed Rule Making, the Commission established a framework for exercise of its auction authority, as amended by the Balanced Budget Act.[38] The Report and Order affirmed that in identifying which classes of licenses should be subject to competitive bidding, the Commission is required to pursue the public interest objectives set forth in Section 309(j)(3).[39] The Report and Order also affirmed that, as part of this public interest analysis, the Commission must continue to consider alternative procedures that avoid or reduce the likelihood of mutual exclusivity.[40] The Commission concluded, however, that its obligation to avoid mutual exclusivity does not preclude it from adopting licensing processes in the non-exempt services that result in the filing of mutually exclusive applications where it determines that such an approach would serve the public interest.[41]

21. As discussed above, we propose to continue the use of a BTA-like licensing scheme for assigning of MDS licenses in the Gulf. Consistent with the requirement of Section 309(j)(1), if we adopt this licensing scheme, under which mutual exclusivity is possible, mutually exclusive applications will be resolved through competitive bidding.[42]

2. Incorporation by Reference of Part 1 Standardized Auction Rules

22. In the Part 1 proceeding, general competitive bidding rules were adopted with the goal of simplifying and streamlining the rule making process for all auctionable services.[43] We propose to conduct the auction for MDS licenses in the Gulf in conformity with the general competitive bidding rules set forth in Part 1, subpart Q of the Commission's rules, and substantially consistent with the bidding

[37] 47 U.S.C. § 309(j)(3).

[38] *Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended*, 15 FCC Rcd 22709 (2000).

[39] *Id*. at ¶¶ 20-27

[40] *Id*.

[41] *Id.*

[42] 47 U.S.C. § 309(j)(1) ("If . . . mutually exclusive applications are accepted for any initial license or construction permit, then, except as provided in paragraph (2), the Commission shall grant the license or permit to a qualified applicant through a system of competitive bidding . . . ."). *See also Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency With GSO and Terrestrial Systems in the KU-Band Frequency Range; Amendment of the Commission's Rules to Authorize Subsidiary Terrestrial Use of the 12.2-12.7 GHz Band by Direct Broadcast Satellite Licensees and Their Affiliates; and Applications of Broadwave USA, PDC Broadband Corporation, and Satellite Receivers, Ltd. to Provide A Fixed Service in the 12.2-12.7 GHz Band*, ET Docket No. 98-206, FCC 00-418 (released December 8, 2000) at ¶¶ 331-334 (finding that mutually exclusive applications for Multichannel Video Distribution and Data Service (MVDDS) licenses must be resolved through competitive bidding).

[43] *Amendment of Part 1 of the Commission's Rules - Competitive Bidding Procedures, WT Docket No. 97-82, Order on Reconsideration of the Third Report and* Order, *Fifth Report and Order, and Fourth Further Notice of Proposed Rulemaking*, 15 FCC Rcd 15293 (2000) ("*Part 1 Fifth Report and Order*").

procedures that have been employed in previous Commission auctions.[44] Specifically, we propose to employ the Part 1 rules governing designated entities, application issues, payment issues, competitive bidding design, procedure and timing issues, and anti-collusion.[45] Under this proposal, such rules would be subject to any modifications that the Commission may adopt in the Part 1 proceeding. In addition, consistent with current practice, matters such as minimum opening bids and reserve prices would be determined by the Wireless Telecommunications Bureau and the Mass Media Bureau pursuant to their delegated authority.[46] We seek comment on whether any of our Part 1 rules would be inappropriate in an auction for this service.

3. Provisions for Designated Entities

23. The Communications Act provides that, in developing competitive bidding procedures, the Commission shall consider various statutory objectives and consider several alternative methods for achieving them.[47] Specifically, the statute provides that, in establishing eligibility criteria and bidding methodologies, the Commission shall "promote economic opportunity and competition and ensure that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women."[48]

---

[44] In the *MDS Report and Order,* the Commission adopted specific competitive bidding procedures and rules to govern MDS auction for authorizations in 493 BTAs. *See* 47 C.F.R. § 21.951 (MDS competitive bidding procedures), 47 C.F.R. § 21.952 (Bidding application procedures), 47 C.F.R. § 21.953 (Prohibition of collusion), 47 C.F.R. § 21.954 (Submission of up front payments), 47 C.F.R. § 21.955 (Submission of down payments), 47 C.F.R. § 21.956 (Filing of long-form applications or statements of intention), 47 C.F.R. § 21.958 (Full payment and issuance of BTA authorizations), 47 C.F.R. § 21.959 (Withdrawal, default and disqualification), 47 C.F.R. § 21.960 (Designated entity provisions for MDS) and 47 C.F.R. § 21.961 (Definitions applicable to designated entity provisions). The Commission stated that in promulgating rules for the 1996 MDS auction, it attempted to design auction rules and procedures that were compatible with the distinct characteristics of MDS. *MDS Report and Order*, 10 FCC Rcd at 9634. On April 11, 2002, the Wireless Telecommunications Bureau pursuant to its delegated authority issued an Order identifying and removing service-specific competitive bidding rules, including those listed above, which had been superseded or made redundant by the Part 1 general competitive bidding rules. *In the Matter of Amendment of Parts 1, 21, 22, 24, 25, 26, 27, 73, 74, 80, 95, 100 and 101 of the Commission Rules – Competitive Bidding*, DA 02-847 (released April 11, 2002). Accordingly, the previously effective service-specific MDS auction rules will not be applied to a Gulf auction.

[45] *See Part 1 Fifth Report and Order*; *See also Amendment of Part 1 of the Commission's Rules - Competitive Bidding Procedures*, WT Docket No. 97-82, *Erratum*, DA 00-2475 (released November 3, 2000).

[46] *In The Matter Of Implementation Of Section 309(j) Of The Communications Act --Competitive Bidding For Commercial Broadcast And Instructional Television Fixed Service Licenses, Reexamination Of The Policy Statement On Comparative Broadcast Hearings, Proposals To Reform The Commission's Comparative Hearing Process To Expedite the Resolution Of Cases*, 13 FCC Rcd 15920 (1998); *see also Amendment of Part 1 of the Commission's Rules -- Competitive Bidding Procedures, WT Docket No. 97-92, Third Report and Order and Second Further Notice of Proposed Rule Making*, 13 FCC Rcd 374, 448-49, 454-55 ("*Part 1 Third Report and Order*") (directing the Bureau to seek comment on specific mechanisms relating to auction conduct pursuant to the Balanced Budget Act); *Part 1 Fifth Report and Order* (delegating authority to seek comment on and set forth mechanisms relating to the day-to-day conduct of specific auctions).

[47] *See Sections 309(j)(3) and 309(j)(4) of the Communications Act*, 47 U.S.C. §§ 309(j)(3), 309(j)(4).

[48] *See* 47 U.S.C. § 309(j)(3)(B).

24. Petitioner proposes that in light of our policy to encourage the participation of small businesses in the licensing process, one of two licenses in the Gulf should be set aside for a small business and that such a small business license be the only one auctioned at this time. With respect to the second license, Petitioner suggests that the Commission review in five years whether to auction a second license. Petitioner proposes that eligibility for the small business license should be limited to entities whose average revenues do not exceed $25 million and whose average total assets do not exceed $75 million for the past three years. Petitioner proposes that we should provide small businesses with a 25% bidding credit for bids placed on the set-aside license.[49] We seek comment on whether bidding credits or other special measures are necessary to encourage participation by small businesses.[50] In particular, we request comment on the advisability of adopting bidding credits or other measures to promote diversification of ownership, and on the appropriateness of adopting rules to prevent unjust enrichment in connection with the special measures approved for designated entities.

25. Section 1.2110(b)(1) of our rules states that the Commission "will establish the definition of a small business on a service-specific basis, taking into consideration the characteristics and capital requirements of the particular service."[51] Currently, Section 21.960 of our rules governs designated entity provisions for MDS.[52] The rule provides that, "A winning bidder that qualifies as a small business, or as a small business consortia, may use a bidding credit of fifteen (15) percent to lower the cost of its winning bid on any of the BTA authorizations awarded in the MDS auction."[53] In addition, Section 21.961(b)(1) defines a small business as "an entity that together with its affiliates has average annual gross revenues that are not more than $40 million for the preceding three calendar years."[54] In support of its decision to issue this specific bidding credit and small business standard, the Commission stated, "Although other services have provided larger bidding credits to certain designated entities, we believe that the fifteen percent credit is sufficient for MDS because, unlike . . . other services, we will offer this bidding credit on all authorizations to be awarded to small businesses."[55] Furthermore, the Commission stated, "Given the capital requirements of the wireless cable industry and its past difficulties in attracting capital, we believe that the $40 million gross revenue standard is appropriate for MDS. If the Commission were to adopt a significantly lower standard for the definition of small business, we would exclude companies with the financial wherewithal to operate wireless cable systems competitive with cable television from eligibility

[49] Amended Petition at 6-7.

[50] Of the 67 winning bidders in the Commission's March 1996 MDS auction, 61 qualified as small entities at the time of the auction.

[51] 47 C.F.R. § 1.2110(b)(1).

[52] 47 C.F.R. § 21.960.

[53] 47 C.F.R. § 21.960(d).

[54] 47 C.F.R. § 21.961(b)(1).

[55] *MDS Report and Order*, 10 FCC Rcd at 9669. The Commission compared MDS to a number of other services and determined that *all* MDS authorizations for small businesses should receive bidding credits as opposed to merely just *some* of the authorizations. *Compare Third Report and Order*, PP Docket No. 93-253, 9 FCC Rcd 2941, 2970 (1994) (Third Memorandum Opinion and Order) (providing twenty-five percent bidding credit on specified channels to certain designated entities in nationwide narrowband PCS auction); *Fourth Report and Order* at 2337 *Fourth Report and* Order, PP Docket No. 93-253, 9 FCC Rcd 2330, 2337 (1994) (offering twenty-five percent bidding credit on one of two IVDS licenses available in each geographic license area).

for installment payments, reduced upfront payments and bidding credits."[56]

26. In the wake of the *Two-Way Order*, MDS licensees have seen the value and commercial viability of their companies increase dramatically, in light of the fact that MDS licensees are constructing extremely flexible, digital two-way systems that provide ultra-high-speed, ultra-high-capacity broadband service, including two-way internet service via cellularized communication systems.[57] Petitioner indicates that it desires to provide fixed, broadband digital communication services to the oil and gas industry in the Gulf.[58] Petitioner's proposed use of MDS spectrum in the Gulf is consistent with the types of broadband services which are being deployed by other MDS licensees across the country.[59] WCA asserts that current land-based BTA authorization holders may have a significant interest in securing all or part of a Gulf BTA-like service area to assure themselves of interference-free service to land-based subscribers. Therefore, WCA opines that land-based BTA authorization holders would likely participate in an auction of a Gulf BTA-like service area.[60] In light of the changes to the nature and use of MDS, as well as the fact that a wide variety of entities of various sizes may participate in an auction of a Gulf BTA-like service area, we believe that the use of different designated entity provisions and small business standard should be applied to such an auction. We propose small business definitions and levels of bidding credits consistent with other wireless services that are equivalent to the type of services MDS licensees are currently providing. We propose three small business definitions and three levels of bidding credits would provide a variety of businesses, including local businesses, with opportunities to participate in the auction of licenses for this spectrum, and may also be appropriate to promote opportunities for the provision of services with varying capital costs. Accordingly, we propose to define a very small business as an entity with average annual gross revenues not exceeding $3 million for the preceding three years, a small business as an entity with average annual gross revenues not exceeding $15 million for the preceding three years, and an entrepreneur as an entity with average annual gross revenues not exceeding $40 million for the preceding three years. We further propose to provide very small businesses with a bidding credit of 35%, small businesses with a bidding credit of 25%, and entrepreneurs with a bidding credit of 15%. The bidding credits we propose here are those set forth in the standardized schedule in Part 1 of our Rules.[61] The first two of these definitions are consistent with the small business definitions we have established for the broadband Personal Communications Services ("PCS") C and F blocks.[62] Given the similarities between broadband PCS and broadband MDS, we tentatively conclude that this consistency is appropriate. We note, however, smaller businesses may be interested in acquiring licenses

[56] *Id*. at 9671 (footnotes omitted).

[57] FCC Staff Report issued by the Office of Engineering and Technology, Mass Media Bureau, Wireless Telecommunications Bureau, and International Bureau: "Spectrum Study of the 2500-2690 MHz Band: The Potential for Accommodating Third Generation Mobile Systems," *Final Report*, ET Docket No. 00-258, released March 30, 2001 ("*Final Report"*).

[58] Amended Petition at 1.

[59] *See Final Report* at 16-17.

[60] WCA Opposition at 27.

[61] In our *Part 1 Third Report and Order*, 13 FCC Rcd at 403-04, we adopted a standard schedule of bidding credits, the levels of which were developed based on our auction experience. *See also* 47 C.F.R. § 1.2110(f)(2).

[62] In our auctions of broadband PCS C and F block licenses, we have provided bidding credits to entities with average annual gross revenues for the preceding three years not exceeding $40 million and entities with average annual gross revenues for the preceding three years not exceeding $15 million. *See* 47 C.F.R. § 24.720(b)(1) & (2).

to provide service in the Gulf and may benefit from bidding credits. For this reason we tentatively conclude that, in addition to establishing small business definitions consistent with those of broadband PCS, we should also adopt the definition of very small business that we propose today. We note that the three-tiered approach to bidding credits we propose here is consistent with the approach we have adopted for the 24 GHz band and that we have proposed for the 3650 - 3700 MHz band.[63]

27. We seek comment on whether this approach is also appropriate here, or whether there is anything about the characteristics and capital requirements of MDS service in the Gulf that would require a different approach. In discussing these issues, commenters are requested to address the expected capital requirements for MDS services in the Gulf. Commenters are invited to use comparisons with other services for which the Commission has already established auction procedures as a basis for their comments regarding the appropriate definitions for small and very small businesses.

28. Petitioner also argues that only one license should be auctioned initially and that the Commission should review in five years whether to auction a second license. Petitioner reasons that unlike land markets, the demand for wireless services is not increasing at an exponential rate in the Gulf.[64] However, WCA, in their opposition to Petitioner's argument, states that the Commission "has recognized that liberal partitioning and disaggregation, coupled with bidding credits, and reduced upfront payments/downpayments" are better ways to increase opportunities for small businesses."[65] We tentatively reject Petitioner's suggestion that we set aside one or more licenses for small businesses. In the *Two-Way Order*, we declined to adopt spectrum set-asides for MDS. We stated, "Such a measure is inappropriate for MDS, given the . . . the lack of sizable, discrete blocks of spectrum to auction."[66] Because we are only proposing to auction two blocks of spectrum, each consisting of two 6 MHz MDS channels, we believe that a set-aside would prevent the timely and efficient use of such spectrum. In lieu of set-asides, we propose to adopt small business bidding credits (see discussion, *supra*). We seek comment on our rejection of Petitioner's request to set aside one or more licenses for small businesses.

---

[63] *See Amendments to Part 1, 2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz*, 15 FCC Rcd 16934 (2000); *Amendment of the Commission's Rules With Regard to the 3650-3700 MHz Government Transfer Band*, *First Report and Order and Second Notice of Proposed Rule Making*, FCC 00-363, 15 FCC Rcd 20488 (2000).

[64] Amended Petition at 8-9.

[65] WCA Opposition at 28. The Commission has determined not to use set-asides as a mechanism for promoting small business participation in several proceedings. *See, e.g., WCS Report and Order*, 12 FCC Rcd at 10882 (declining to adopt set-asides in favor of substantial bidding credits and other small business preferences); *Amendment of Part 90 of the Commission's Rules to Provide for the Use of 220-222 MHz Band by the Private Land Mobile Radio Service,* 12 FCC Rcd 10943, 11077 (1997) (declining the use of set-asides because of the large number and variety of licenses); *Amendment of Commission's Rules Regarding the 37.0 -38.6 GHz and 38.6 - 40.0 GHz Bands, Implementation of Section 309(j) of the Communications Act - Competitive Bidding, 37.0 and 38.6 - 40.0 GHz,* 12 FCC Rcd 18600, 18727 (1997) (rejecting set-asides because of the large number of licenses offered and the opportunities provided to small business by way of bidding credits). However, the Commission provided set-asides for C block PCS licenses to ensure that entrepreneurs are provided opportunities to acquire spectrum for their needs. *Implementation of Section 309(j) of the Communications Act -- Competitive Bidding*, 9 FCC Rcd 5532, 5585 (1994). Subsequently, the Commission asserted that maintaining set-asides for entrepreneurs, for some but not all C block spectrum, will help smaller businesses in that band continue to achieve their business goals as well as providing meaningful opportunities for new entrepreneurial firms to enter the market. *Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licensees*, *Sixth Report and Order*, 15 FCC Rcd 16266 (2000).

[66] 10 FCC Rcd 9589, 9664 (1995).

4. Filing Procedures

29. Petitioner has suggested that in any auction of the proposed Gulf Service Area, we should streamline the filing and auction procedures we adopted in the *MDS Report and Order and Two-Way Order*.[67] Specifically, Petitioner proposes to amend the rules to abrogate the requirement that the winning bidder of a Gulf Service Area auction area submit a long-form application pursuant to Section 21.956 of our rules.[68] Under Section 21.956, within thirty business days of being notified of its status as a winner of a BTA service area, each bidder must submit an initial long-form application for an MDS station license, along with any required exhibits. Alternatively, the winner may submit a statement of intention with regard to the BTA service area, along with any required exhibits, showing the encumbered nature of the BTA, identifying all previously authorized or proposed MDS and ITFS facilities, and describing in detail the winning bidder's plans for obtaining the previously authorized and/or proposed MDS stations within the BTA. Petitioner claims that the application process rules were intended to protect the incumbent land-based MDS and ITFS licensees against interference. Petitioner submits that because there are no incumbent MDS licenses in the Gulf, a Gulf licensee should not be required to file a separate long-form application for each proposed MDS station in the market.[69]

30. We tentatively disagree with Petitioner that amendments to the filing and auction rules should be made to specifically address licensing in the Gulf. Rather, we propose to continue to use the existing filing and auction procedures.[70] This would enable potential applicants to apply for authorizations and to participate in an auction relying on rules and utilizing electronic auction software which already exist and which have proven to be effective in earlier auctions. We believe use of the existing procedures will not only prove easier for auction participants, but will also be more efficient for the Commission. We find no reason to make special exceptions for the Gulf licensee with regard to the filing of long-form applications merely because no incumbent MDS licensees presently exist. On the contrary, issues with interference do arise in the context of adjoining land-based licensees. Accordingly, the long-form application rules, including Section 21.956, will help to ensure that proposed MDS stations will not interfere with adjoining land-based licensees. In addition, designated entities must describe on their long-form applications how they satisfy the requirements for eligibility for designated entity status.[71] We note that in our *Two-Way Order,* we adopted a streamlined application processing system based on applicant certifications of compliance with the technical and notice rules, timely notice to all potentially affected parties and random audits of submitted applications. Thus, after the initial main station applications are filed, a Gulf licensee can use the streamlined process for two-way service.[72] We invite comment on our proposals.

---

[67] Amended Petition at 9-10.

[68] 47 C.F.R. § 21.956.

[69] Specifically, Petitioner suggests that as long as certain criteria are met, the Gulf licensee should be able to construct MDS stations anywhere within the Gulf without filing separate long-form applications. Petitioner states that as long as the Gulf licensee's operations do not exceed a signal strength of -75 dBw/m2 along the border between it and any land licensee and the proposed signal strength is 2 dB lower than the signal strength at which the licensee is permitted to operate at the border, no long-form applications are necessary. Petitioner does acknowledge that a Gulf licensee still should be required to file a certification of completion of construction of MDS stations so that the Commission can remain informed about the licensee's operations. *Id.* at 10.

[70] *See* discussion at ¶ 22, *supra*.

[71] 47 C.F.R. § 1.2110(j); 47 C.F.R. § 21.960(e).

[72] *Two-Way Order*, 13 FCC Rcd at 19146-50.

F. Limitations on WCS and LMDS Licensees

31. Petitioner proposes that to promote competition and avoid excessive concentration of licenses, eligibility for the Gulf license should be limited to applicants that do not already hold Gulf licenses for WCS. Petitioner also proposes to preclude any future LMDS licensees from being eligible to hold a Gulf license.[73] In response, WCA states that Petitioner has provided no evidence that allowing one entity to control the MDS authorizations and the WCS and/or LMDS licenses for the Gulf coast would deter competition or resulting in excessive concentration. In support of its position, WCA asserts that Petitioner's request is self-serving, in that Petitioner has not proposed excluding the Gulf cellular licensees from eligibility because Petitioner itself is affiliated with a Gulf cellular licensee.[74]

32. Sections 27.12 and 27.302 of the Commission's Rules[75] impose no restrictions on eligibility, other than the foreign ownership restrictions set forth in Section 310 of the Communications Act.[76] We believe that Petitioner has provided no evidence that WCS and/or LMDS licensees for the Gulf of Mexico exercise market power and that the use of eligibility restrictions would be appropriate. We tentatively conclude that we will not impose restrictions on eligibility for a license in the Gulf.[77] Thus, no prospective licensee would be barred from participation in the auction or from post-auction acquisition of a license for this spectrum based on its status as a provider of WCS, LMDS or other telecommunications services. We believe that opening this spectrum to as wide a range of applicants as possible will encourage entrepreneurial efforts to develop new technologies and services, while helping to ensure the most efficient use of the spectrum. We invite comments on this proposal.

G. Partitioning and Disaggregation

33. Partitioning is a method of subdividing the operating authority for a market area. Licensees that partition create a geographic subdivision of their market area. Petitioner proposes that we defer any decision whether to allow partitioning in the Gulf. According to Petitioner, customers in the Gulf are found on oil platforms, meaning that no customers exist in over 90% of the Gulf. Further, as stated in ¶ 14, *supra*, Petitioner asserts that the market is very small in terms of population, with only approximately 20,000 persons present. Finally, Petitioner states that it is unclear what would constitute a geopolitical boundary in the Gulf.[78] WCA responds that Petitioner's proposal to prevent partitioning in the Gulf is an effort to minimize competition. According to WCA, the Commission permits WCS licensees in the Gulf to partition

[73] Amended Petition at 7-8.

[74] WCA Opposition at 29-30.

[75] 47 C.F.R. §§ 27.12, 27.302. *See also WCS Report and Order*, 12 FCC Rcd at 10829.

[76] 47 U.S.C. § 310.

[77] *See In the Matter of Rulemaking to amend Parts 1, 2, 21 and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Polices for Local Multipoint Distribution Serve and For Fixed Satellite Services*, 15 FCC Rcd 11857 (2000) (concluding that the LMDS eligibility restriction should be allowed to sunset because open eligibility (1) will not pose a significant likelihood of substantial competitive harm in any market; (2) is likely to provide access to additional capital to fully develop LMDS; (3) will treat LMDS similarly to substitutable spectrum; and (4) should help make services more available in rural areas).

[78] Amended Petition at 9.

their spectrum.[79] Similarly, WCA points out that when the Commission adopted service rules for the public coast service, which permits licensees to provide maritime commercial mobile radio services, regional licensees were permitted to freely partition and/or disaggregate licenses in part to mitigate the impact that competitive bidding would have upon small businesses.[80]

34. The Commission presently permits geographic partitioning and spectrum disaggregation for MDS.[81] We tentatively reject Petitioner's proposal to deny a Gulf Licensee the right to partition. The Commission has recognized that liberal partitioning "will provide licensees with the flexibility to use their spectrum more efficiently, will increase opportunities for small businesses and other entities to enter the broadband market, and ill speed service to underserved or unserved areas."[82] In particular, the Commission has noted that permitting parties to partition licenses freely without regard to geopolitical boundaries may promote service to smaller markets.[83] As WCA asserts, the ability to tailor service to one's needs is particularly valuable when as large a service area as the Gulf is being auctioned. We invite comments on this proposal.

35. We also seek comment on possible market incentives for disaggregating spectrum in the Gulf.[84] We currently permit or are considering similar partitioning and disaggregation rules in many services, including the 800 MHz SMR, paging, 220 MHz, 38 GHz fixed point-to-point microwave, WCS, LMDS, and cellular.[85] In the Upper 700 MHz First Report and Order, we provided licensees in the 746-764 MHz and

---

[79] WCA Opposition at 30-31. *See also WCS Report and Order,* 12 FCC Rcd at 10836-9.

[80] WCA Opposition at 30-31. *See also Amendment of the Commission's Rules Concerning Maritime Communications*, 12 FCC Rcd 16949, 16966 (1997).

[81] 47 C.F.R. § 21.931; *Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service,* 10 FCC Rcd 9589, 9614-15 (1995). Additionally, we impose unjust enrichment provisions for partitioning by small businesses to non-small businesses. *See Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service*, 10 FCC Rcd 13821, 13833 (1995).

[82] *See In the Matter of Geographic Partitioning and Spectrum Disaggregation by Commercial Mobile Radio Services Licenses*, 11 FCC Rcd 21831 (1996).

[83] *Id.*

84 "Disaggregation" is the assignment of discrete portions or "blocks" of spectrum licensed to a geographic licensee or qualifying entity. Disaggregation allows for multiple transmitters in the same area operated by different companies (thus the possibility of harmful interference increases). With partitioning, one company operates in a licensed area.

[85] *800 MHz SMR*, 11 FCC Rcd at 1576, 1578-1580 (permitting partitioning for rural telephone companies and requesting comment on partitioning and disaggregation for EA licensees in the upper 10 MHz block); *Paging Second Report and Order*, 12 FCC Rcd at 2821-2826 (permitting geographic partitioning for paging licensees and seeking comment on disaggregation for all licensees); *220 MHz Third Report and Order*, FCC 97-57 (permitting partitioning for all Phase II 220 MHz licensees and seeking comment on partitioning for Phase I licensees and disaggregation for all licensees); *Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands*, Notice of Proposed Rulemaking and Order, 11 FCC Rcd 4930, 4972-73, PP 89-90 (1995) (proposing partitioning for rural telephone companies and seeking comment on whether partitioning and disaggregation should be available to all licensees); *WCS Report and Order* (permitting partitioning and disaggregation for all WCS licensees); *Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band to Establish* (continued….)

776-794 MHz bands flexibility by permitting spectrum disaggregation without restriction on the amount of spectrum to be disaggregated.[86] We tentatively conclude that we also should permit licensees in the Gulf to disaggregate their licenses. We tentatively conclude that spectrum disaggregation can result in efficient spectrum use and economic opportunity for a wide variety of applicants, including small business, rural telephone, minority-owned, and women-owned applicants.[87] We seek comment on this proposal.

H. System Configuration

36. Petitioner states that its Gulf system configuration will differ from that contemplated for land-based two-way MDS systems. Land-based two-way systems will typically consist of three elements: (a) one or more central transmitting stations (*i.e.* main and/or booster stations) providing the "downstream" signals beamed to customer premises; (b) response stations located at customer premises which are used to send "upstream" signals from the customer to the service provider; and (c) hub stations, which are centrally-located receive-only sites used for receiving and processing the signals transmitted by all of the surrounding response stations. Petitioner argues that it has no need for hub stations because of the very low density of potential customer sites in the Gulf of Mexico.[88] There are only a limited number of fixed sites which they propose to serve and these sites can transmit directly back to the associated Main or Booster station. Petitioner therefore proposes to amend Rule Parts 21 and 74 to permit this form of operation and to also relieve Gulf of Mexico systems of the necessity of conforming to the requirements of the *Methodology for Predicting Interference from Response Station Transmitters and to Response Station Hubs and for Supplying Data on Response Station Syste*ms ("*Two-Way* Methodology"), which sets forth the manner in which MDS/ITFS applicants must specify the proposed number of response stations, as well as their locations and various technical parameters.[89]

37. In evaluating Petitioner's proposal, we recognize that a two-way MDS system in the Gulf could differ substantially from a land-based two-way system in terms of design and message routing patterns. Petitioner's proposed system configuration is a mix of point-to-multipoint and point-to-point operations, where some customers in some areas can be served directly by a single centralized downstream transmitter (*i.e.* main or booster station) and other customers, in more remote areas, will need an intervening relay station or some other method in order in order to receive and respond to signals from the nearest central station. It is understandable, therefore, why Petitioner would wish to make major changes in the existing MDS two-way rules in order to accommodate their communications system architecture. In response, we would note that the MDS and ITFS services were created *specifically* to provide for point-to-multipoint communications and this concept was strongly reaffirmed in the *Two-Way*

(Continued from previous page)
Rules and Policies for Local Multipoint Distribution Service and Fixed Satellite Services, Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rulemaking, CC Docket No. 92-297, FCC 97-82 (1997) (permitting geographic partitioning and spectrum disaggregation for LMDS licensees).

[86] *Upper 700 MHz First Report and Order*, 15 FCC Rcd at 506, P 74.

[87] *See* 47 U.S.C. S 309(j)(4)(C).

[88] Amended Petition at 3.

[89] We released a revised version of the Two-Way Methodology, pursuant to the provisions of footnote 129 of the *Two-Way Order*. *See Public Notice, Commission Amends Methodology Used for Calculation of Interference Protection and Data Submission for MDS and ITFS Station Applications for Two-Way Systems*, DA-0093 (released April 27, 2000). The full text of the revised Two-Way Methodology can be found at http://www.fcc.gov/mmb/vsd/files/methodology.doc.

Order when we significantly expanded and enhanced the flexibility for system operators to provide their customers with upstream communications capabilities back to centrally-located receiving points (*i.e.* hub stations). Notwithstanding the differences noted by Petitioner between Gulf-based and land-based two-way systems, we believe that the existing MDS rules should be applied intact (with the exception noted below relating to interference standards) uniformly to all MDS systems. Nevertheless, because Petitioner's requested system architecture is essentially a request to waive our rules, we believe that if and when Petitioner ultimately becomes a Gulf licensee, it, or any other auction winner, can make waiver requests at that time.[90]

I. Interference Protection Requirements

38. In finalizing the new rules and regulations for MDS/ITFS operations in the *Two-Way Order*, the Commission adopted a very rigorous approach to the calculation of inter-system interference. Our goal was to minimize, to the maximum extent possible, any interference which might occur from system to system. Our approach consists of four fundamental limitations on the amount of interfering power which one system may project into a neighboring system: (a) A limit of –73 dBW/sq. meter on the power flux density extending beyond the outer edge of a system;[91] (b) A requirement for a ratio of at least 45 dB between the strength of a desired signal within an incumbent system vs. an undesired interfering signal radiated from a neighboring system within a distance of 100 miles, if both signals occupy the same frequency channel;[92] (c) A requirement for a ratio of at least 0 dB between the strength of a desired signal within an incumbent system vs. an undesired interfering signal radiated from a neighboring system within 100 miles, if the signals are on adjacent channels;[93] and, (d) A requirement that the noise floor of hub station receivers be protected from degradation by all co- and adjacent channel transmitters in neighboring systems within a distance of 100 miles.[94] For calculating interference involving two-way systems, the Commission adopted a standard signal propagation model which must be used in determining whether or not the three criteria above are met. Petitioner proposes to extend the use of these criteria to interference calculations involving Gulf stations, although with some modifications. Petitioner would limit the power flux density of its interfering signal to –75 dBW/sq. meter (*i.e.*, 2 dB less interference) at neighboring land-based systems, and Petitioner would extend the 100 mile distance to 150 miles for calculation of the 45 dB and 0 dB criteria.[95]

39. As noted by WCA in their opposition to Petitioner's argument, the overriding issue with respect to possible interference from, and to, Gulf systems is the matter of signal propagation, specifically, the propagation of signals over large bodies of water.[96] Although not an exact science, the

[90] To the extent that Petitioner's system would involve point-to-point operations, we believe that these operations can be accommodated within existing two-way rules by the use of additional booster stations and additional hub (and non-hub) receiving stations, located as necessary, in order to link outlying response stations to central stations.

[91] 47 C.F.R. § 21.902.

[92] *Id.*

[93] *Id.*

[94] 47 C.F.R. § 21.909.

[95] Amended Petition at 14-16.

[96] WCA Opposition at 20-22.

process of evaluating the propagation of signals over land masses has been refined to the point where the results of applying widely-accepted propagation models, such as the modified Epstein/Peterson model required by the Commission's *Two-Way Order* for MDS and ITFS two-way systems, are sufficiently reliable for all but the most unusual signal paths. Unfortunately, the propagation of signals over large bodies of water can differ markedly from signal propagation over land and no comparably acceptable and standardized model is available for calculating over-water propagation. The principal difference involved, at least with respect to Gulf waters, is the presence of "ducting" along the signal path. Simply put, ducting is a phenomenon whereby a radio signal is trapped within and between stratified layers of the atmosphere which have non-uniform refractivity indexes. This layering is caused by climatological processes such as subsidence, advection, surface heating and radiative cooling and the ducts created due to these factors can extend for distances of tens to hundreds of miles. Ducting of signals, including MDS/ITFS microwave signals, enables these signals to travel relatively unattenuated for distances far greater than would occur without the presence of the duct. Numerous studies have been conducted of signals propagated in ducting environments, such as the study cited by Petitioner published by Dougherty/Dutton for the U.S. Department of Commerce in 1981.[97] Petitioner cites a passage from this study which concludes that ducting is as likely to occur in southern Illinois and Alabama as it is in the Gulf, indicating ducting is as much of a problem over land as over water.[98] Petitioner does not cite a later passage, however, which more closely focuses on the issue of ducting over bodies of water vs. ducting over land, where the Dougherty/Dutton study states:

> There are some uncertainties associated with these ground-based ducts, especially those observed at the many recording stations on land. The widespread simultaneous observation of ducts over land does not mean, necessarily, that those ducts are horizontally extensive (*i.e*. continuous) unless the terrain is approximately flat. The larger-scale irregularities of terrain (hills, cities, etc.) tend to modify the characteristics and limit the continuity or horizontal extent of ducts over land. Sea-surface ducts tend to be more prevalent and extensive than those over land, although there is some evidence that ocean depth and ocean currents can limit their horizontal extent.[99]

40. This passage indicates that ducting over water is more likely to produce ducts of significant horizontal extent than will be produced by ducting over land. Thus, although for land-based systems the naturally occurring limitations of terrain obstructions such as hills and foliage provide significant barriers to the very long range propagation of interfering signals from one system into another, no such obstructions are present over water and this effect is magnified by the presence of ducting of the signal beyond the natural barrier of the radio horizon. The implications of these facts are extremely important because the entire system Petitioner proposes would be located over water and thus in an area prone to ducting. We see three principal ramifications of this situation relevant to the instant proceeding:

> (a) Stations located in Gulf waters will have the potential to cause interference to each other at distances far greater than would occur for

[97] H.T. Dougherty and E.J. Dutton, *The Role of Elevated Ducting for Radio Service and Interference Fields*, U.S. Department of Commerce, National Telecommunications and Information Administration Report 81-69 (March, 1981).

[98] Amended Petition at 15-16.

[99] Dougherty and Dutton, *The Role of Elevated Ducting for Radio Service and Interference Fields, supra*.

> land-based systems interfering with each other. Thus, for applicants and licensees in the Gulf, extra care would be necessary to make certain that the effects of long-range interfering signals have been included in the design and operation of all main, booster, response and hub stations. Each licensee would need to adequately protect all the stations in its own system, as well as all of the stations in any other systems in the Gulf, even those beyond the radio horizon.
>
> (b) Stations licensed in the Gulf waters will have to protect land-based systems from harmful interference due to ducting. Licensees in Gulf waters will need to exercise the same precautions against causing interference to land-based stations as would be necessary for protecting other stations situated in Gulf waters, *i.e.*, the assumption of an entirely non-obstructed path subject to ducting. For protecting land-based stations near to, but not directly adjoining Gulf waters, a degree of protection would still be necessary which is greater than that now required for protection between land-based stations.
>
> (c) Land-based stations near Gulf waters will have the potential to cause harmful interference to stations situated in Gulf waters due to ducting of the signal on over-water paths. Guarding against this would require land-based system designers to take any and all steps necessary so that they not only protected all other nearby land-based systems (using standard propagation models) but also implemented sufficient precautions to reduce to an acceptable level the amount of interference power being radiated on azimuths in the direction of Gulf systems.

41. With respect to (a) above, we believe that Gulf licensees will be able to configure their systems so that intra- and intersystem interference will not be a problem. In the event of a conflict where multiple Gulf licensees cannot resolve an interference situation, either at the application stage or operating stage of system implementation, we will resolve the dispute and may, at our discretion, require either or both Gulf applicants/licensees to make system modifications to alleviate potential, or actual, harmful interference.

42. Issues (b) and (c) are far more troublesome. Turning first to (b), the modifications proposed by Petitioner (*See* ¶38, *supra*) to ameliorate interference from Gulf stations to land-based stations are inadequate, in that they do not meaningfully account for the effects of ducting likely to greatly strengthen interfering Gulf signals received at land-based stations. Absent a generally accepted signal propagation model for the waters of the Gulf of Mexico, and given the *certainty* that ducting will occur between Gulf and land-based stations, we see three mutually exclusive alternative solutions: (i) evaluate each and every potential interference situation on a case-by-case basis; or (ii) permit use of our existing interference standards and propagation model and then, when interference occurs, invoke the provisions of Sections 21.238 and 21.239 of our rules and place the burden of rectifying interference upon the interferer; or (iii) propose an alternative propagation calculation methodology which is sufficiently conservative to ensure that, in the vast majority of instances, no interference will occur. Our choice, for reasons of fairness and practicality, is alternative (iii), and we are proposing a method for the calculation of signal attenuation specifically applicable to Gulf of Mexico paths.[100] Also, we do not believe that

[100] 47 C.F.R. §§ 21.238 and 21.239.

imposition of Sections 21.238 and 21.239 required by (ii) would be efficacious, in that it would necessarily result in an after-the-fact scenario, where a land-based system and its customers were already receiving destructive interference prior to the commencement of any remedial actions.

43. As the basis for a propagation calculation methodology for ducted MDS signals in the Gulf, we are proposing to require that the amount of attenuation along the path from the Gulf transmitters to the protected land-based systems/stations be premised on free-space path attenuation without regard to the actual radio horizon along the path. Therefore, we would require that these interference calculations be based on a "flat-earth" model rather than on the standard 4/3 curved-earth model. In this way, we will be assured that the methodology will yield a value for the strength of the interfering signal which is the largest that could reasonably occur. We are proposing to require the use of this methodology for interfering paths from the systems of all Gulf of Mexico licensees into those portions of the systems of land-based MDS licensees which are within 20 miles of the Gulf Service Areas. For the portions of land-based MDS systems more than 20 miles inland from the Gulf Service Areas, we are proposing to require that free-space attenuation be assumed up to the 20 mile point, and then standard Epstein/Peterson propagation methods (from the *Two-Way* Methodology) be used inland beyond the 20 mile point. We realize that this methodology is conservative, in that, the actual interfering signal from the Gulf of Mexico station may be below the level predicted by this model. Ducting is a weather-related phenomenon and is thus highly variable both in location and intensity throughout the Gulf area. However, given the very low spatial density of potential MDS stations in the Gulf Service Areas we are proposing, we believe that system designers will have adequate flexibility to establish system architecture such that they can achieve the levels of interference protection required and still comfortably meet all of the communications needs of their customers.

44. Issue (c) raises considerations similar to (b), above, and also raises another consideration which could have a serious adverse impact on land-based systems, namely: If land-based systems must fully protect Gulf stations from harmful interference, then the measures taken to comply with this requirement could also impact the capability of the land-based systems to deliver services to their own customers. This could happen because the technical modifications made to the land-based systems in order to minimize the strength of their signals in the direction of nearby Gulf systems could also affect the strength of their signals received by their customers. For example, the land-based system may find it necessary, in order to protect a Gulf system, to reduce its main, booster or response station transmitter power levels, or to use transmitting antennas at these stations at lower heights, or to use different transmitting (or receiving) antennas with patterns optimized for interference reduction rather than for transmission of signals to or from their customers. In its opposition to Petitioner's petition, WCA is concerned about the impact of this issue, saying:

> WCA believes that under Petitioner's proposal, wireless cable systems along the Gulf coast might have to make substantial modifications that would reduce their ability to provide service to the 16.7 million people residing in Gulf Coast BTAs, just to meet their interference protection obligations under the existing rules to a Gulf of Mexico BTA authorization holder. The wireless systems that WCA's members and others are operating and developing have been designed to optimize coverage over land. Since those systems have been designed in an environment without a Gulf of Mexico BTA-like service area, they have been designed without regard to the potential for interference to a Gulf of

Mexico BTA.[101]

45. As indicated in this *Notice*, we have found sufficient merit in Petitioner's argument to justify serious exploration of, and concrete proposals for, establishing MDS operations in the Gulf of Mexico. However, in our proposals, we also intend to fully protect the rights of all current MDS licensees to serve their BTAs, including those portions of the BTAs which border directly on the Gulf of Mexico. In order to do this, current licensees must have as much flexibility as possible to design their systems to achieve maximum coverage. We believe it will be virtually impossible for current licensees to achieve this degree of coverage if they must afford full interference protection to Gulf of Mexico systems and use the free-space calculation methodology described above for determining the strength of their interfering signals at protected Gulf receivers. Given the much greater population density of the land-based relative to Gulf systems, the steps taken to modify one land-based main or booster station so that it can fully protect a very few Gulf stations might mean the loss of service to hundreds or thousands of households in the urban or suburban area the main or booster station was designed to serve. We believe this tradeoff would be unacceptable and we are therefore proposing that land-based stations be allowed to provide a lesser degree of protection to Gulf stations than Gulf stations must provide to land stations. Specifically, we are proposing to permit use of the (*Two-Way* Methodology) Epstein/Peterson propagation model by land-based stations for calculating interference into Gulf systems. As a practical matter, this lesser requirement may have little adverse effect on Gulf systems because those systems, in being designed to provide a very high level of protection to land-based systems, will themselves then be much more protected from interference from land-based systems, *i.e.*, in arranging their paths so as to not cause interference, those paths will also be less vulnerable to receiving interference.

J. Five year Build-out Period

46. The Commission presently requires that BTA authorization holders have five years from the grant date of the initial BTA authorization to construct, develop and expand MDS station operations in their respective protected service areas.[102] We propose to apply the five-year build-out requirement to any Gulf licensee. We seek comment on this proposal.

K. Period of Station License

47. Under the Commission's rules, licenses for MDS stations are to be "issued for a period not to exceed 10 years."[103] In the *MDS Report and Order*, we determined that all MDS station licenses granted in every BTA service area auctioned should be for a ten-year period to run from the date that the Commission declared bidding in the MDS auction to be closed.[104] The Commission reasoned that beginning the ten-year license term from the date that the bidding closed, rather than from the date that each individual station license was issued, would allow the Commission to easily process the licenses and deal more expeditiously with their renewal.[105] We propose to apply the ten-year license period set forth Section 21.45(a) of the Commission's rules to any Gulf Service Area licensee. However, because we are

[101] WCA Opposition at 23.

[102] 47 C.F.R. § 21.930.

[103] 47 C.F.R. § 21.45(a).

[104] *MDS Report and Order*, 10 FCC Rcd at 9657-58.

[105] *Id.*

auctioning a discrete amount of spectrum, the administrative convenience concerns present in the 1996 auction will not be present in an auction of the Gulf Service Area. Therefore, we propose that the ten-year license period for Gulf Service Area licensees should run from the date that such licenses issued. We seek comments on these proposals.

IV. REGULATORY FLEXIBILITY ANALYSIS

48. As required by the Regulatory Flexibility Act (RFA),[106] we have prepared an Initial Regulatory Flexibility Analysis of the possible significant economic impact on small entities by the proposals adopted in this document. *See* Appendix A.

V. PROCEDURAL MATTERS

A. Ex Parte Presentations

49. This is a permit-but-disclose notice-and-comment rulemaking proceeding. Ex parte presentations are permitted, except during the Sunshine Agenda period, provided that they are disclosed as provided in the Commission's rules. See generally 47 C.F.R. §§ 1.1202, 1.1203, 1.1206. Written submissions, however, will be limited as discussed below.

B. Initial Paperwork Reduction Act of 1995 Analysis

50. The action contained herein has been analyzed with respect to the Paperwork Reduction Act of 1995 and found to impose new or modified reporting and recordkeeping requirements or burdens on the public. Implementation of these new or modified reporting and recordkeeping requirements will be subject to approval by the Office of Management and Budget (OMB) as prescribed by the Act. The new or modified paper work requirement contained in this *Notice of Proposed Rulemaking* (which are subject to approval by OMB) will go into effect upon OMB approval.

C. Comment Filing Procedures

51. General Requirements. Pursuant to Sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on or before 60 days after publication of this Notice in the Federal Register, and reply comments on or before 90 days after publication of this Notice in the Federal Register. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies. See Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24121 (1998). To file formally in this proceeding, you must file an original and four copies of all comments, reply comments, and supporting comments. If participants want each Commissioner to receive a personal copy of their comments, an original plus nine copies must be filed.

52. In addition, comments may be filed using the Commission's Electronic Comment Filing System ("ECFS"). Comments filed through the ECFS can be sent as an electronic file via the Internet to <http://www.fcc.gov/e-file/ecfs.html>. Generally, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers appear in the caption of this proceeding, however, commenters must transmit one electronic copy of the comments to each docket or rulemaking number

[106] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 *et. seq*., has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

referenced in the caption. In completing the transmittal screen, commenters should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply. Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appear in the caption of this proceeding, commenters must submit two additional copies for each additional docket or rulemaking number. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). The Commission's contractor, Vistronix, Inc., will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, N.E., Suite 110, Washington, D.C. 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743. U.S. Postal Service first-class mail, Express Mail, and Priority Mail should be addressed to 445 12th Street, SW, Washington, D.C. 20554. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission. Finally, we request that a courtesy copy be filed with Shellie Blakeney, Wireless Telecommunications Bureau, Room 3-A223, Federal Communications Commission.

53. Other requirements. Comments and reply comments must include a short and concise summary of the substantive arguments raised in the pleading. Comments and reply comments must also comply with Section 1.49 and all other applicable sections of the Commissions rules.[107] We also direct all interested parties to include the name of the filing party and the date of the filing on each page of their comments and reply comments.

54. Parties who choose to file by paper should also submit their comments on diskette. Parties should submit diskettes to Jonathan Levy, Office of Plans and Policy, 445 12th Street N.W., Room 7-C362, Washington, D.C. 20554. Such a submission should be on a 3.5-inch diskette formatted in an IBM compatible form using MS DOS 5.0 and Microsoft Word, or compatible software. The diskette should be accompanied by a cover letter and should be submitted in "read only" mode. The diskette should be clearly labeled with the party's name, proceeding (including the lead docket number in this case), type of pleading (comments or reply comments), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase "Disk Copy - Not an Original." Each diskette should contain only one party's pleadings, referable in a single electronic file.

55. Additional Information. For additional information on this proceeding, contact Shellie Blakeney, (202) 418-1784, Wireless Telecommunications Bureau, 445 Twelfth Street, S.W., Room 3-A223, Washington, D.C. 20554.

[107] *See* 47 C.F.R. § 1.49. We require, however, that a summary be included with all comments and reply comments. The summary may be paginated separately from the rest of the pleading (*e.g.*, as "i, ii"). *See* 47 C.F.R. § 1.49.

VI. ORDERING CLAUSES

56. IT IS ORDERED THAT, pursuant to the authority contained in Sections pursuant to the authority contained in sections 4(i), 303(r), and 309(j) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), and 309(j), this *Notice of Propose Rulemaking* is hereby ADOPTED.

57. IT IS FURTHER ORDERED that the Commission's Office of Consumer and Governmental Affairs, Reference Information Center, SHALL SEND a copy of this *Notice of Proposed Rulemaking* including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A--INITIAL REGULATORY FLEXIBILITY ANALYSIS

Notice of Proposed Rulemaking

As required by the Regulatory Flexibility Act (RFA),[108] this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in the *Notice of Proposed Rulemaking ("NPRM")*. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments as set forth in paragraph 47 of the *NPRM*. The Commission will send a copy of the *NPRM*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration. *See* 5 U.S.C. § 603(a). In addition, the *NPRM* and IRFA (or summaries thereof) will be published in the Federal Register. *Id*.

I. Need for, and Objectives of, the Proposed Rules

Section 309(j) of the Communications Act directs the Commission to disseminate licenses among a wide variety of applicants, including small businesses and other designated entities.[109] Section 309(j) also requires that the Commission ensure the development and rapid deployment of new technologies, products, and services for the benefit of the public, and recover for the public a portion of the value of the public spectrum resource made available for commercial use.[110] On November 23, 1998, PetroCom License Corporation ("Petitioner") filed an amended petition for rulemaking requesting that the Commission amend its rules to permit licensing of the Multipoint Distribution Service ("MDS") and Instructional Television Fixed Services ("ITFS") spectrum in the Gulf of Mexico. Petitioner asks that the Commission establish a Basic Trading Area like-service area in the Gulf similar to the 1995 *MDS Report and Order*.[111]

Upon consideration of these numerous requests, the Commission has tentatively concluded that it is in the public interest to permit licensing of the MDS spectrum in the Gulf of Mexico. The Commission believes that this *NPRM* will provide the Commission with an opportunity to develop a record on the specific proposals to open eligibility for this spectrum in the Gulf of Mexico and otherwise revise the MDS rules for the benefit of consumers and the economy. In addition, the Commission believes that the tentative conclusions and proposals set forth in this *NPRM* help meet the goals and objectives of section 309(j), and promote competition while maintaining the fair and efficient implementation of the auctions program. Accordingly, the Commission seeks comment on all proposals, alternatives, tentative conclusions, and other issues described in the *NPRM*; and the impact that such proposals, alternatives, tentative conclusions, and other issues may have on small entities.

---

[108] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 *et. seq*., has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

[109] 47 U.S.C. § 309(j)(3)(B).

[110] *Id.* §§ 309(j)(3)(A),(C)

[111] *Report and Order on Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act - Competitive Bidding*, 10 FCC Rcd 9589, 9619 (1995) ("*MDS Report and Order"*).

II. Legal Basis

This action is authorized under Sections 4(i), 303(r), and 309(j) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), and 309(j).

III. Description and Estimate of the Number of Small Entities To Which the Proposed Rules Will Apply

The RFA directs agencies to provide a description of, and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.[112] The Regulatory Flexibility Act defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction" under section 3 of the Small Business Act.[113] A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.[114]

A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."[115] Nationwide, as of 1992, there were approximately 275,801 small organizations.[116] The definition of "small governmental jurisdiction" is one with populations of fewer than 50,000.[117] There are 85,006 governmental jurisdictions in the nation.[118] This number includes such entities as states, counties, cities, utility districts and school districts. There are no figures available on what portion of this number has populations of fewer than 50,000. However, this number includes 38,978 counties, cities and towns, and of those, 37,556, or 96 percent, have populations of fewer than 50,000.[119] The Census Bureau estimates that this ratio is approximately accurate for all government entities. Thus, of the 85,006 governmental entities, we estimate that 96 percent, or about 81,600, are small entities that may be affected by our rules. Nationwide, there are 4.44 million small business firms, according to SBA reporting data.[120] The applicable definition of small entity is the definition under the SBA rules applicable to radiotelephone (wireless) companies. This provides that a small entity is a radiotelephone company employing no more than 1,500 persons.[121] According to the Bureau of the Census, only 12 radiotelephone firms from a total of 1,178 such firms that operated during

[112] 5 U.S.C. § 603(b)(3).

[113] *Id*. § 601(3).

[114] *Id*. § 632.

[115] *Id*. § 601(4).

[116] Department of Commerce, U.S. Bureau of the Census, 1992 Economic Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

[117] 5 U.S.C. § 601(5).

[118] 1992 Census of Governments, U.S. Bureau of the Census, U.S. Department of Commerce.

[119] *Id*.

[120] *See* 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

[121] 13 C.F.R. § 121.201, NAICS codes 513321, 513322, and 513330.

1992 had 1,000 or more employees;[122] therefore, at least 1,166 radiotelephone firms in 1992 had 1,500 or fewer employees. We are unable at this time to quantify the specific impact of our proposals on these firms, but invite comment on this issue.

MDS historically provided primarily point-to-multipoint, one-way video services to subscribers.[123] The Commission later amended its rules to allow MDS licensees to provide a wide range of high-speed, two-way services to a variety of users.[124] In connection with the 1996 MDS auction, the Commission defined small businesses as entities that had annual average gross revenues for the three preceding years not in excess of $40 million.[125] The Commission established this small business definition in the context of this particular service and with the approval of the SBA.[126] The MDS auction resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs).[127] Of the 67 auction winners, 61 met the definition of a small business. At this time, we estimate that of the 61 small business MDS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent MDS licensees that are considered small entities.[128] After adding the number of small business auction licensees to the number of incumbent licensees not already counted, we find that there are currently approximately 440 MDS licensees that are defined as small businesses under either the SBA or the Commission's rules. Some of those 440 small business licensees may be affected by the proposals in this Order.

IV. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements:

At this time, the Commission does not anticipate the imposition of new reporting, recordkeeping, or other compliance requirements as a result of this *NPRM*. We seek comment on this tentative conclusion.

V. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered:

The RFA requires an agency to describe any significant alternatives that it has considered in

[122] 1992 Census, Series UC92-S-1, at Table 5, NAICS codes 513321, 513322, and 513330.

[123] For purposes of this item, MDS includes both the single channel Multipoint Distribution Service (MDS) includes Local Multipoint Distribution Service (LMDS), and the Multichannel Multipoint Distribution Service (MMDS).

[124] *Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions*, 13 FCC Rcd 19112 (1998), recon., 14 FCC Rcd 12764 (1999), further recon., 15 FCC Rcd 14566 (2000).

[125] 47 CFR 21.961 and 1.2110.

[126] *Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act - Competitive Bidding*, 10 FCC Rcd 9589, 9670 (1995), 60 FR 36524 (July 17, 1995).

[127] Basic Trading Areas (BTAs) were designed by Rand McNally and are the geographic areas by which MDS was auctioned and authorized. *See Id*. at 9608.

[128] 47 U.S.C. 309(j). (Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47U.S.C. Section 309(j). For these pre-auction licenses, the applicable standard is SBA's small business size standard for "other telecommunications" (annual receipts of $11 million or less). *See* 13 CFR 121.201, NAICS code 513220.

reaching its proposed approach, which may include the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any party thereof, for small entities.

In this action, we tentatively reject Petitioner's suggestion that we set aside one or more licenses for small businesses. Because we are only proposing to auction two blocks of spectrum, each consisting of two 6 MHz MDS channels, we believe that a set-aside would prevent the timely and efficient use of such spectrum. We seek comment on our rejection of Petitioner's request to set aside one or more licenses for small businesses. In lieu of setting aside a license in the Gulf, we note that Section 309(j)(4)(A) of the Communications Act provides that to promote small businesses, we shall consider alternative payment schedules, including lump sums or guaranteed installment payments.[129] However we note that previous Commission actions, the Commission has upheld its prior determination that installment payments should not be used in the immediate future as a means of financing small business participation in our auction program. Moreover, in recent legislation, Congress dictated that certain future auctions effectively be conducted without installment payments.[130]

The Commission expects that the creation of a Gulf Service Area will have a minimal impact on small entities. Moreover, the *NPRM* does not propose any reporting requirements applicable to small entities. We tentatively conclude that our proposals in the *NPRM* would impose minimum burdens on small entities. We encourage comment on this tentative conclusion.

VI. Federal Rules that May Duplicate, Overlap, or Conflict With Proposed Rules

None.

[129] 47 U.S.C. § 309(j)(4)(A).

[130] See Section 3001 of the Omnibus Consolidated Appropriations Act for 1997, P.L. 104-208, 110 Stat. 3009 (1996). See also the Balanced Budget Act of 1997, P.L. 105-33, 111 Stat. 251 (1997).